# Space Science Seminar
# Tuesday, 2014 October 7
# 10:30 a.m.
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## Wind and Rain from the Sun

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In this talk I will describe sources of the slow solar wind, and how we can determine where they come from. One of the sources is from the edges of active regions, and has been studied extensively with the EUV Imaging Spectrometer (EIS) on board the Hinode spacecraft. These potential sources of the slow wind are regions of low intensity, but high Doppler velocity. Combining with modeling, we discover that not many of the sources actually make it out into the solar wind from the solar disk. The importance of predicting this is discussed in terms of the Solar Orbiter mission (planned for launch in 2017, and being developed by ESA with NASA participation). The second topic is that of coronal rain - cold material that falls back to the solar surface. I will describe an example of coronal rain that is hit by a filament eruption. This was observed by the recently-launched NASA IRIS mission, and we show the complexity of the dynamics in the rain as they respond to the impact.

http://solarscience.msfc.nasa.gov/colloquia/